



## Card Procurement Study

Presented to the  
**TransLink® Design Review and  
Implementation Committee (DRAIC)**

December 13, 2006

Smart Card. Smart Travel.

- Smart Card Basics
- Background for the Study
- Card Inventory Issues
- Scope of the Study



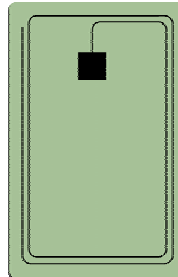
# Smart cards come in three basic configurations

## Contact



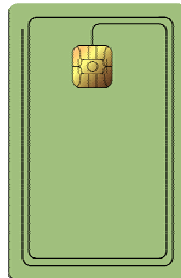
**Make up:** Chip and Contact  
**Use:** Parking, phone, credit cards  
**Cost:** \$2

## Contactless



**Make up:** Chip and antenna  
**Use:** Credit card, transit, security  
**Cost:** \$2

## Dual Interface



**Make up:** Chip, contact and antenna  
**Use:** Government security, TransLink®  
**Cost:** \$5



# Smart card technology can be compared to computers

Component	Microchip	Operating System (O/S)	Application (Format)
<b>Current TransLink® Card</b>	ST19 (manufacturer is ST)	Motorola/ERG proprietary	TransLink® transit file format
<b>Analogous PC Component</b>	Micro processor	Windows	Oracle database





# The current situation has raised concerns regarding the supply of smart cards

- The existing, dual-interface TransLink® card uses a ST19 microchip with the application running on Motorola/ERG proprietary operating system
- The ST19 chip is no longer in production
- Marketing for the TransLink® launch includes giveaways of up to 220,000 adult cards. The current card inventory of adult cards is about 250,000.
- Institutional programs (ECO Pass, Go Pass, Cal Student Pass, etc.) will add to card demand

***TransLink® does not want to run out of cards***



Smart Card. Smart Travel.

# Our card inventory appears adequate in the short term

	Current Inventory	Inventory after 75k Procurement	Inventory after Free Card Giveaways*
<b>Adult Cards</b>	251,000	286,000	66,000
<b>Senior Cards</b>	61,000	71,000	71,000
<b>RTC Cards</b>	90,000	120,000	48,000**
<b>Total</b>	402,000	477,000	185,000

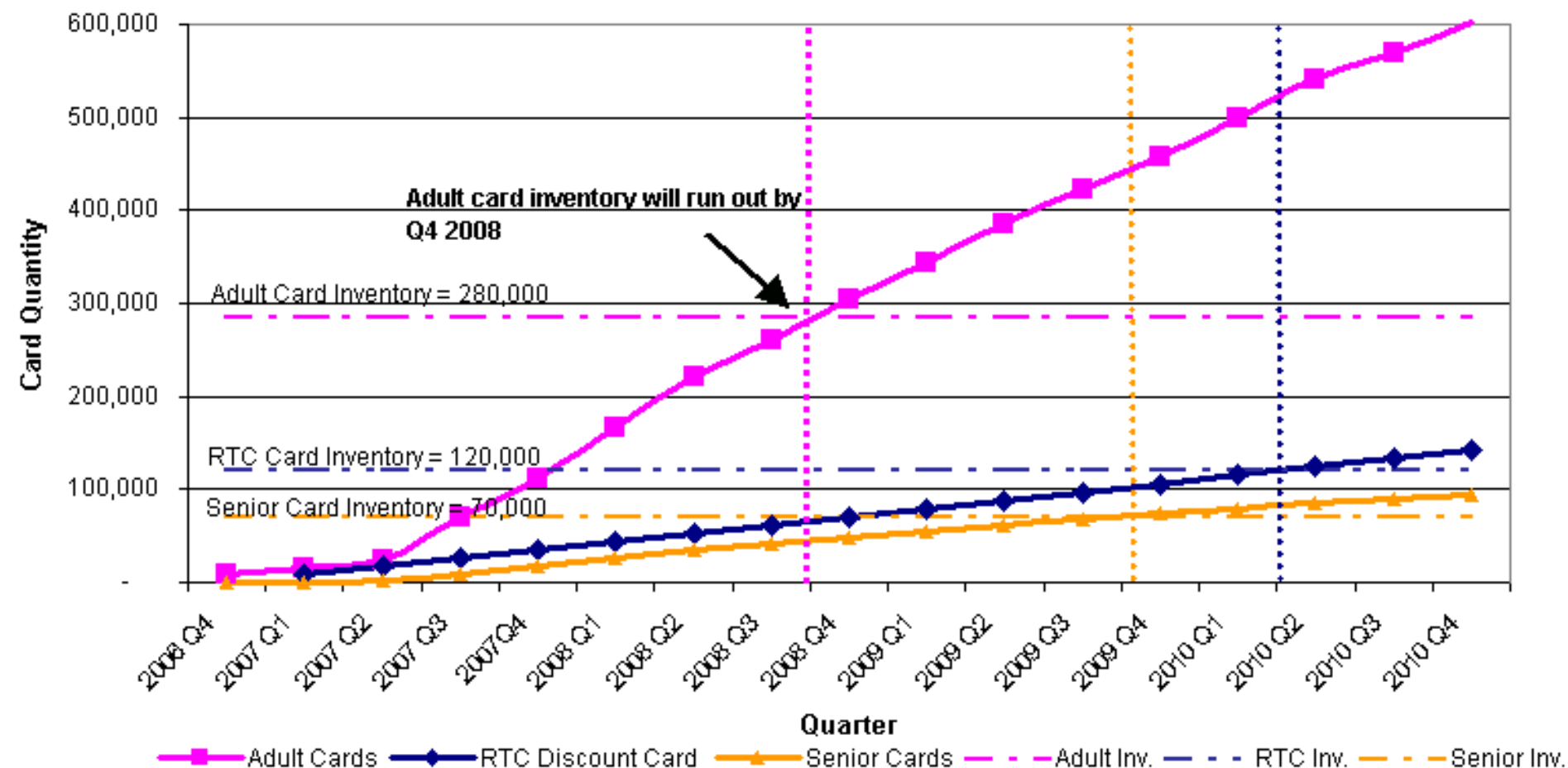
\* Free cards will be distributed over time

\*\* RTC cards will be distributed at a rate of 36,000 per year

Based on current projections, this stock will last through the launch of Muni and BART but could run short by the end of 2008. See model results on next slide.



# Worst-case scenario model (does not include non-VTA institutional programs)



# Minimum inventory requirements

The point at which new cards need to be ordered needs to account for:

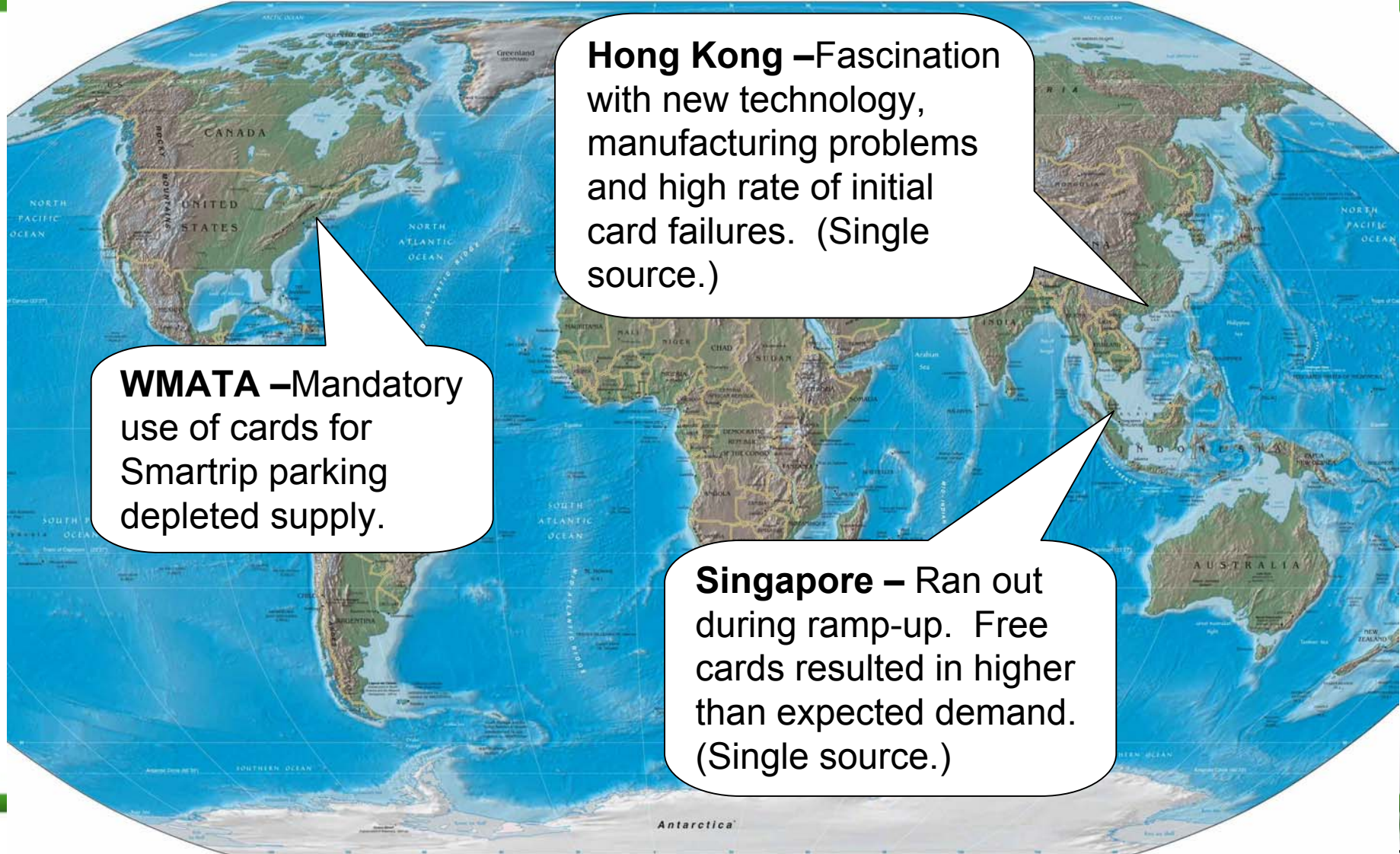
- Third-party retail outlets - carry 20,000 cards
- TransLink® Service Bureau - carries approximately 100,000 cards
- SFMTA parking - will carry at least **5,000(?)** cards





# Some new smart card systems have run out of cards or come close to it

special sovereignty



# The study is focused on the direction for the next-generation TransLink® smart cards

- The scope includes:
  - Review of industry trends
  - Analysis of procurement process
  - Development of alternatives and evaluation based on factors including costs, performance, required system changes, risk of obsolescence, proprietary systems, and adherence to open standards
- Results will include recommendations for:
  - Preferred approach for next two card procurements, after the upcoming 75,000-card procurement
  - A proposed procurement schedule
  - Incorporation of new trends, if any, in smart card fare systems



# Additional information will be needed before procurement plans can be finalized

- Scope
  - Who will manage the procurement
  - What type of procurement (low bid or best value)
- Schedule of procurement cycle
  - Procurement package development and approval
  - Proposal and selection process
  - Chip procurement lead time
  - Chip manufacturing lead time
  - Card manufacturing lead time
- Budget
  - Source of funding for the procurement
  - Estimated cost of the procurement



# Preliminary recommendations and some next steps include:

- Purchase 75,000 dual interface cards with the remaining ST19 chips in stock at ASK (already in process)
- Finish review of the card technology alternatives and make a recommendation for next procurement (this may be an interim procurement)
- Identify risks of selected alternative and propose mitigation plan
- Report back to this group next quarter





**The End**